



# Nutrition for Family Living

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Walking and physical activity reduce hip fracture risk in postmenopausal women  
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## Walking and physical activity reduce hip fracture risk in postmenopausal women

Hip fractures can be serious and debilitating for older adults. Most hip fractures result from falls, but studies have shown that physical activity can reduce the risk of falls by improving muscle strength and balance. Physical activity can also reduce the risk of fractures if it includes weight-bearing exercise that improves bone density.

Data collected as part of the Nurses' Health Study were examined to look at relationships between walking, leisure time physical activity, and the risk of hip fracture in postmenopausal women. This study included 61,200 women aged 40-77 years who were predominantly white.

The study showed that:

- Total physical activity, from exercise and leisure time activities, was associated with a significantly lower risk of hip fracture.
- Walking for four hours/week or more was associated with a 41% lower risk of hip fracture.
- Women with a higher BMI had lower risk of hip fracture, but they could reduce their risk even more by being more physically active.
- If women were sedentary, increasing their activity to 4 hours a week or more reduced their risk of hip fracture. But women who had been active, and became less active, increased their risk.
- Hormone replacement therapy did not increase or decrease the risk of hip fracture in active women.

### *Implications for educators:*

Reducing hip fractures is one of the many benefits of physical activity. Activities that improve muscle strength or balance can help prevent falls, while weight-bearing activities can increase muscle size and strength and improve bone density. Since walking is a common activity and effective in reducing fracture risk, educators can help people think of ways to include more walking in their daily lives.

Feskanich D, Willett W and Colditz G. Walking and leisure-time activity and risk of hip fracture in postmenopausal women. *JAMA*. 2002;288:2300-2306.



## Teenage girls' attitudes about milk and calcium-rich foods

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Only 10% of girls ages 9 to 17 meet the new 1300 mg/d Adequate Intake (AI) recommendations for calcium. Among girls in grades 8-12, more than 2/3 don't consume enough calcium, with the average intake around 800 mg. Studies have shown that calcium intake is usually adequate during the elementary school years, but declines rapidly during adolescence.

Researchers conducted focus groups to investigate girls' attitudes about milk and other calcium-rich foods. Thirty-five focus groups (n=200) were conducted at public schools in ten western states with Asian, Hispanic and white girls who were 11-12 years old and 16-17 years old.

There were more similarities than differences among age and ethnic groups. The researchers found:

- Family was more influential among Asian girls. However, milk is not part of a traditional Asian diet, so families did not expect girls to drink it.
- Girls thought that milk had positive effects on health, but that milk was more important for boys than for girls. The girls felt boys drank more milk because boys are not concerned with their weight and wanted to become strong.
- White girls had the most positive comments about milk. Hispanic girls had the most negative comments about milk.
- Overall there were few comments about lactose intolerance.
- Generally, families did not expect girls to drink milk. Parents did not act as role models for drinking milk. If someone in a family did encourage milk drinking, it was most often the mother.
- Many girls controlled their own beverage choices at home, and a variety of choices were available. They commented that they drank more milk when they were younger because they did not have choices.
- Participants associated milk with breakfast and school lunch, and less with dinner. Milk was not associated with eating at restaurants or malls.
- All groups mentioned foods that did or did not go with milk. Cereal and sweets such as cookies and cakes were associated with milk. Asian foods, pizza, and spicy foods did not go with milk.
- All groups said they liked cheese, ice cream and pizza. Hispanic girls liked milk shakes, puddings and flans. Asian girls reported liking milk warm, sweetened, or with tea.

### *Implications for educators:*

Preadolescent and adolescent girls named similar influences on milk consumption, but older girls had more freedom of choice. Ethnic differences in the types of calcium-rich foods preferred by girls suggests that different messages may be appropriate for different groups. Educators should also encourage parents, especially mothers, to serve as role models for calcium consumption. Because teens have more non-milk options away from home, calcium-rich foods and beverages should be available and emphasized at home.

Auld, G et al. Perspectives on intake of calcium-rich foods among Asian, Hispanic, and white preadolescent and adolescent females. *J Nutr Educ Behav.* 2002;34:242-251.



### For Your Use: Why teenage girls don't drink enough milk

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Is anyone surprised to learn that teenage girls don't drink enough milk? Only 10% of girls ages 9 to 17 meet the new Adequate Intake (AI) recommendations for calcium (1300 mg/day). Studies have shown that girls usually get enough calcium during elementary school, but their intake drops off once they reach middle and high school.

Researchers wanted to know why teenage girls drink less milk and eat fewer calcium rich foods than they did when they were younger. Thirty-five focus groups were conducted at public schools in ten western states. A total of 200 Asian, Hispanic and white girls who were 11-12 years old and 16-17 years old participated.

Girls told researchers that they didn't drink milk at home with meals because their parents didn't expect them to. When they were younger, they didn't have a choice, but as teens, they were given more choices of what to drink and they stopped choosing milk. Girls also said their parents didn't drink milk, either.

Some calcium-rich foods were popular with teenage girls. Pizza, ice cream and cheese were popular with most of the participants, and Hispanic girls also liked milk shakes, puddings and flans. Asian girls liked milk warm, sweetened, or with tea. Participants talked about how milk "went with" some foods but not others. Cereal and sweets such as cookies and cakes did go with milk. Asian foods, pizza, and spicy foods did not go with milk.

How can adults encourage teenage girls to drink more milk and eat more calcium-rich foods? First, parents and other adults are role models for drinking milk and eating foods with calcium. If the norm in your family is "everyone drinks milk" then your teenager will be more likely to choose milk on her own. She may make other choices when she's away from home – but she will still be getting calcium at home. Ask your teen which calcium rich snack foods she and her friends like, and keep those available for them. Everyone benefits when parents set an example for healthy eating habits and make healthy food choices easy for their kids.